

**Notice of Allowability**

Application No.

10/799,360

Examiner

William K Cheung

Applicant(s)

TULLY, DAVID

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to IDS.
2. ☒ The allowed claim(s) is/are 1-21, 25-45 and 52-63.
3. ☒ The drawings filed on 11 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 072204
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### *Restriction / Election*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-21, 25-45, 52-63, drawn to a polymerization process, classified in class 526, subclass 266.
  - II. Claims 22-24, 46-51, drawn to a polymer product, classified in class 526, subclass 266.
  - III. Claims 64-69, drawn to a pharmaceutical products, classified in class 424, subclass 1+.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the process as claimed can be used to make other and materially different product such as a polystyrene living polymer.
3. Inventions Group II and Group III are independent and distinct from each other because the invention Group II is directed to a polymer product and the invention III is directed to a pharmaceutical product.

4. Inventions Group I and Group III are independent and distinct from each other because the invention Group I is directed to a process for making a polymer and the invention III is directed to a pharmaceutical product.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. During a telephone conversation with Angela P. Horne, Ph.D. (Reg. No. 41,079) on December 14, 2000, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-21, 25-45, 52-63. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-24, 46-51, 64-69 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### **EXAMINER'S AMENDMENT**

9. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Angela P. Horne, Ph.D. (Reg. No. 41,079) on December 14, 2000.

10. Cancel nonelected claims 22-24, 46-51, 64-69.

### ***Allowances***

11. Claims 1-21, 25-45, 52-63 are allowed.

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12. The following is an examiner's statement of reasons for allowance:

As of the date of this office action, the examiner has not located or identified any reference that can be used singularly or in combination with another reference including the closest prior art of Benoit et al. (Macromolecules 2000, 33, 363-370) to render the present invention anticipated or obvious to one of ordinary skill in the art.

*The invention of claims 1-21, 25-45, 52-63 relates to a **method of synthesizing a poly(oxazolone) homopolymer via a nitroxide-mediated controlled living free radical polymerization reaction**, the method comprising:*

***providing a reactive polymer propagating species having a free radical moiety;***

***reacting the reactive polymer propagating species with a first vinyl-functionalized oxazolone monomer, thereby producing an extended reactive polymer propagating species;***

***coupling a nitroxide capping compound with the extended reactive polymer propagating species, thereby forming an intermediary dormant species;***

***dissociating the nitroxide capping compound from the intermediary dormant species, thereby regenerating the extended reactive polymer propagating species; and***

***repeating the reacting, coupling, and dissociating steps with additional vinyl-functionalized oxazolone monomers, thereby synthesizing the poly(oxazolone)***

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*homopolymer via a nitroxide-mediated controlled living free radical polymerization reaction.*

Benoit et al. (abstract) disclose a living polymerization process mediated by nitroxide. However, Benoit et al. are silent on a polymerization process for preparing a poly(oxazolone) homopolymer or copolymer. Therefore, it would not be apparent to one of ordinary skill in art to use the process teachings in Benoit et al. to obtain the polymerization process of claims 1-21, 25-45, 52-63. Claims 1-21, 25-45, 52-63 are allowed.

In light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, and to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

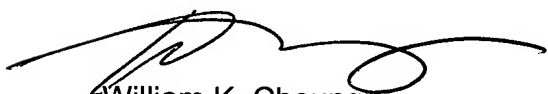
Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number is (571)

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272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung

Primary Patent Examiner

December 16, 2004

**WILLIAM K. CHEUNG**  
**PRIMARY EXAMINER**